

Draft 5/26/05

Attorney Docket No. HOS-62  
MAIL STOP AMENDMENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: ) Group Art Unit: 1771  
MORITA; MUROI; KAKUTA ) Examiner: Hai Vo  
Serial No. 09/996,777 )  
Filed: November 30, 2001 )  
For: MULTIPLE LAYERS LAMINATED POLYOLEFIN FOAM

Appendix A

Please amend the following claims as indicated in the following claims according to 37 C.F.R. § 1.121 concerning a manner for making claim amendments.

1. (Currently amended) A multiple layers layered laminated polyolefin foam having a plurality of polyolefin layers laminated on at least one side of a ~~non-crosslinked~~ polyolefin foam by a co-extrusion foaming method and wherein the polyolefin foam has a boiling xylene insoluble content of 0 to 5wt%, said polyolefin foam comprising:

an outermost layer ~~constituting said~~ formed from one of the plurality of polyolefin layers,

an innermost layer ~~constituting said~~ formed from one of the plurality of polyolefin layers,

USSN 09/996,777  
MORITA et al.

wherein ~~the~~ a thickness of the outermost layer ~~constituting~~  
~~said plurality of polyolefin layers~~ is 5 to 80  $\mu\text{m}$ , and the a  
density  $d$  (g/L) of said polyolefin foam, ~~the~~ a melt flow rate  $X$   
(g/10 min) of ~~the~~ a polyolefin resin constituting the innermost  
layer ~~among said plurality of polyolefin layers~~, and ~~the~~ a  
thickness  $Y$  ( $\mu\text{m}$ ) of the innermost layer ~~of said plurality of~~  
~~polyolefin layers~~ satisfy the following relationships (1) to  
(4):

$$Y \leq 0.29 d X \quad \dots (1)$$

$$5 \leq X \leq 40 \quad \dots (2)$$

$$70 \leq Y \leq 300 \quad \dots (3)$$

$$100 \leq d \leq 300 \quad \dots (4)$$

wherein a thickness of ~~an~~ the entire laminated foam is 3 to  
8 mm and a closed cell ratio of the laminated foam is no less  
than 60%,

wherein the outermost layer contains a ~~polymer~~ polymeric-  
type antistatic agent so that a surface layer resistivity is no  
more than  $1 \times 10^{13} \Omega$ ,

wherein a ratio ( $\alpha/\beta$ ) of a melt flow rate ( $\alpha$ ) of the  
~~polymer~~ polymeric-type antistatic agent and a melt flow rate ( $\beta$ )  
of ~~the~~ a base resin ~~constituting~~ of the outermost layer ~~among~~

USSN 09/996,777  
MORITA et al.

~~the polyolefin layers~~ is no less than 0.5 and  $\beta$  is 3 to 35 g/10 min.

2. (Currently amended) The multiple ~~layers~~ layered laminated polyolefin foam according to claim 1, wherein the density d (g/L) of the polyolefin foam is 120 to 300 g/L, the melt flow rate X (g/10 min) of the polyolefin resin constituting the innermost layer ~~among the polyolefin layers~~ is 8 to 40 g/10 min, and the thickness Y ( $\mu$ m) of the innermost layer ~~among the polyolefin layers~~ is no more than 0.26dX.

3. (Currently amended) The multiple ~~layers~~ layered laminated polyolefin foam according to claim 1, wherein the base resin ~~constituting the polyolefin foam and the polyolefin layers in the multiple layers laminated polyolefin foam~~ is of at least one type selected from the group consisting of polypropylenes , and polyethylenes and mixtures thereof.

Claims 4-15 (Cancelled)

16. (Currently amended) The multiple ~~layers~~ layered laminated polyolefin foam according to claim 1, wherein the

USSN 09/996,777  
MORITA et al.

~~polymer-type~~ polymeric-type antistatic agent comprises a compound ~~of at least one type~~ selected from the group consisting of polyetheresteramides and polyethers as ~~the~~ main component.

a

17. (Currently amended) The multiple ~~layers~~ layered laminated polyolefin foam according to claim 16, wherein the polyetheresteramide is a polymer obtained by polymerization reaction of a polyamide with an alkylene oxide adduct of a bisphenol.

18. (Currently amended) The multiple ~~layers~~ layered laminated polyolefin foam according to claim 17, wherein the polyamide is ~~of at least one type~~ selected from the group consisting of caprolactam polymer, 12-aminododecanoic acid polycondensate, and adipic acid-hexamethylene diamine polycondensate.

19. (Currently amended) The multiple ~~layers~~ layered laminated polyolefin foam according to claim 16, wherein the polyether is a compound having at least two quaternary ammonium bases and is ~~the~~ a reaction product of (a) an oxyalkylene ether obtained by addition reaction of an alkylene oxide with a phenol-divinyl benzene addition polymer, (b) one type of glycidyl ether selected from the group consisting of glycidyl

USSN 09/996,777  
MORITA et al.

ethers of polyoxyalkylene glycols and glycidyl ethers of adducts of phenols and alkylene oxides, an amine compound having an aliphatic hydrocarbon group containing 1 to 22 carbon atoms, and a quaternizing agent.

20. (Currently amended) The multiple ~~layers~~ layered laminated polyolefin foam according to claim 19, wherein (a) the polyoxyalkylene ether is an adduct obtained by the addition reaction of ethylene oxide and a copolymer of ethylene oxide and propylene oxide with a bisphenol-divinyl benzene addition polymer, (b) the glycidyl ether of polyoxyalkylene glycol is glycidyl ether of polyoxyethylene glycol, and the adduct of a phenol and an alkylene oxide is an adduct of bisphenol and ethylene oxide.

21. (Currently amended) The multiple ~~layers~~ layered laminated polyolefin foam according to claim 1, wherein the ~~polymer-type~~ polymeric-type antistatic agent is present in the outermost polyolefin layer in an amount of from 2 to 30 wt.%.

22. (Currently amended) The multiple ~~layers~~ layered laminated polyolefin foam according to claim 16, wherein the ~~polymer-type~~ polymeric-type antistatic agent is present in the outermost polyolefin layer in an amount of from 2 to 30 wt.%.

USSN 09/996,777  
MORITA et al.

Claims 23-24 (Cancelled)

25. (Currently amended) The multiple ~~layers~~ layered laminated polyolefin foam according to claim 1 wherein the closed cell ratio of the laminated foam is at least no less than 70%.

26. (Currently amended) The multiple ~~layers~~ layered laminated polyolefin foam according to claim 1 wherein the closed cell ratio of the laminated foam is at least no less than 80%.

Claims 27-29 (Cancelled)